

LISTING OF CLAIMS

1. (Currently Amended) A projection system comprising:

a plurality of light-producing portions, each of the light-producing portions operable to produce modulated light of certain color spectra;

a light-directing element operable to receive the modulated light spectra from the light-producing portions and to combine those modulated light spectra; and

a projection lens operable to project the combined modulated light spectra onto a display surface;

wherein at least one of the plurality of light-producing portions comprises:

a light source operable to produce light;

a first panel, operable to receive light from the light source and to modulate the received light; and

a first oblique anisotropic compensation element adjacent to the first panel, the first oblique anisotropic compensation element being operable with the projection lens to provide an azimuthally averaged, improved contrast image upon the display surface relative to an uncompensated image, wherein the improvement to the image on the display surface is relatively independent of the point of view of an observer.

2. (Previously Presented) A projection system according to claim 1 wherein the anisotropy of the first oblique compensation element is positive anisotropy.

3. (Previously Presented) A projection system according to claim 1 wherein the anisotropy of the first oblique compensation element is selected from the group consisting of positive anisotropy, negative anisotropy, and biaxial anisotropy.

4. (Previously Presented) A projection system according to claim 1 and further comprising at least a second panel and at least a second oblique anisotropic compensation element adjacent to the second panel, wherein the first and second panels are operable to modulate first and second light spectra, respectively.

5. (Previously Presented) A projection system according to claim 4 wherein one of the first and second oblique anisotropic compensation elements has positive anisotropy, and the other of the first and second oblique anisotropic compensation elements has negative anisotropy.

6. (Previously Presented) A projection system according to claim 5 wherein one of the first and second light spectra is blue and the other is red or green, and wherein the oblique anisotropic compensation element having the positive anisotropy is used to change a state of polarization of off-normal incident light in the first light spectrum and wherein the oblique anisotropic compensation element having the negative anisotropy is used to change a state of polarization of off-normal incident light in the second light spectrum.

7. (Previously Presented) A projection system according to claim 4, wherein at least one of the first and second oblique anisotropic compensation elements are splayed relative to their respective adjacent panels.

8. (Previously Presented) A projection system according to claim 7, wherein both of the first and second oblique anisotropic compensation elements are splayed and wherein their splays are symmetric to each other.

9. (Previously Presented) A projection system according to claim 7, wherein both of the first and second oblique anisotropic compensation elements are splayed and wherein their splays are asymmetric to each other.

10. (Previously Presented) A projection system according to claim 7, wherein both of the first and second oblique anisotropic compensation elements have the same anisotropy.

11. (Previously Presented) A projection system according to claim 7, wherein both of the first and second oblique anisotropic compensation elements have different anisotropies.

12. (Previously Presented) A projection system according to claim 7, wherein at least one of the first and second oblique anisotropic compensation elements has biaxial anisotropy.

13. (Previously Presented) A projection system according to claim 1, further comprising at least one micro-lens array adjacent to the first panel.

14. (Previously Presented) A projection system according to claim 1, wherein the light-directing element is an X-cube.

15. (Previously Presented) A projection system according to claim 1, wherein the first oblique anisotropic compensation element is substantially optimized for maximum azimuth-averaged contrast.

16. (Previously Presented) A projection system according to claim 1, wherein the first panel is a liquid crystal panel.

17. (Previously Presented) A projection system according to claim 1, wherein the oblique anisotropic compensation element includes a polymeric liquid crystal material.

18. (Previously Presented) A projection system according to claim 1, wherein the oblique anisotropic compensation element is a multilayer compensation element.

19. (Previously Presented) A projection system according to claim 1 and further comprising a second oblique anisotropic compensation element adjacent to the first panel.

20. (Previously Presented) A projection system according to claim 19, wherein the first and second oblique anisotropic compensation elements are on the same side of the first panel.

21. (Previously Presented) A projection system according to claim 19, wherein the first and second oblique anisotropic compensation elements are on the opposite sides of the first panel.

22. (Previously Presented) A projection system according to claim 13, wherein the first oblique anisotropic compensation element is on the low f-number side of the at least one micro-lens array.

23. (Previously Presented) A projection system according to claim 1, wherein the first panel and the first oblique anisotropic compensation element are formed on a common substrate.

24. (Previously Presented) A projection system according to claim 23, wherein the first panel is the substrate on which the first oblique anisotropic compensation element is formed.

25. (Previously Presented) A projection system according to claim 1, wherein the first oblique anisotropic compensation element has a tilt angle that ranges from about 0° to about 50°.

26. (Previously Presented) A projection system according to claim 1, wherein the first oblique anisotropic compensation element is splayed relative to the first panel.

27. – 59. (Canceled)

60. (Currently Amended) A projection system comprising:

a plurality of light-producing portions, each of the light-producing portions operable to produce modulated light of certain color spectra;

a light-directing element operable to receive the modulated light spectra from the light-producing portions and to combine those modulated light spectra; and

a projection lens operable to project the combined modulated light spectra onto a display surface;

wherein at least one of the plurality of light-producing portions comprises:

a light source operable to produce light;

a first panel, operable to receive light from the light source and to modulate the received light; and

a first oblique anisotropic compensation element adjacent to the first panel, the first oblique anisotropic compensation element being operable with the projection lens to provide an azimuthally averaged, improved contrast image upon the display surface relative to an uncompensated image, wherein the improvement to the image on the display surface is relatively independent of the point of view of an observer, and wherein the first oblique anisotropic compensation element is configured to change a state of polarization of off-normal incident light, and wherein the anisotropy of the first oblique compensation element is positive anisotropy.

61. (Previously Presented) A projection system according to claim 60 wherein the anisotropy of the first oblique compensation element is selected from the group consisting of: positive anisotropy, negative anisotropy, and biaxial anisotropy.

62. (Previously Presented) A projection system according to claim 60 and further comprising at least a second panel and at least a second oblique anisotropic compensation element adjacent to the second panel, wherein the first and second panels are operable to modulate first and second light spectra, respectively.

63. (Previously Presented) A projection system according to claim 62 wherein one of the first and second oblique anisotropic compensation elements has positive anisotropy, and the other of the first and second oblique anisotropic compensation elements has negative anisotropy.

64. (Previously Presented) A projection system according to claim 63 wherein one of the first and second light spectra is blue and the other is red or green, and wherein the oblique anisotropic compensation element having the positive anisotropy is used to change a state of polarization of off-normal incident light in the first light spectrum and wherein the oblique anisotropic compensation element having the negative anisotropy is used to change a state of polarization of off-normal incident light in the second light spectrum.

65. (Previously Presented) A projection system according to claim 62, wherein at least one of the first and second oblique anisotropic compensation elements are splayed relative to their respective adjacent panels.

66. (Previously Presented) A projection system according to claim 65, wherein both of the first and second oblique anisotropic compensation elements are splayed and wherein their splays are symmetric to each other.

67. (Previously Presented) A projection system according to claim 65, wherein both of the first and second oblique anisotropic compensation elements are splayed and wherein their splays are asymmetric to each other.

68. (Previously Presented) A projection system according to claim 65, wherein both of the first and second oblique anisotropic compensation elements have the same anisotropy.

69. (Previously Presented) A projection system according to claim 65, wherein both of the first and second oblique anisotropic compensation elements have different anisotropies.

70. (Previously Presented) A projection system according to claim 65, wherein at least one of the first and second oblique anisotropic compensation elements has biaxial anisotropy.

71. (Previously Presented) A projection system according to claim 60, further comprising at least one micro-lens array adjacent to the first panel.

72. (Previously Presented) A projection system according to claim 60, wherein the light-directing element is an X-cube.

73. (Previously Presented) A projection system according to claim 60, wherein the first oblique anisotropic compensation element is substantially optimized for maximum azimuth-averaged contrast.

74. (Previously Presented) A projection system according to claim 60, wherein the first panel is a liquid crystal panel.

75. (Previously Presented) A projection system according to claim 60, wherein the oblique anisotropic compensation element includes a polymeric liquid crystal material.

76. (Previously Presented) A projection system according to claim 60, wherein the oblique anisotropic compensation element is a multilayer compensation element. 32

77. (Previously Presented) A projection system according to claim 60 and further comprising a second oblique anisotropic compensation element adjacent to the first panel.

78. (Previously Presented) A projection system according to claim 77, wherein the first and second oblique anisotropic compensation elements are on the same side of the first panel.

79. (Previously Presented) A projection system according to claim 77, wherein the first and second oblique anisotropic compensation elements are on the opposite sides of the first panel.

80. (Previously Presented) A projection system according to claim 71, wherein the first oblique anisotropic compensation element is on the low f-number side of the at least one micro-lens array.

81. (Previously Presented) A projection system according to claim 60, wherein the first panel and the first oblique anisotropic compensation element are formed on a common substrate.

82. (Previously Presented) A projection system according to claim 81, wherein the first panel is the substrate on which the first oblique anisotropic compensation element is formed.

83. (Previously Presented) A projection system according to claim 60, wherein the first oblique anisotropic compensation element has a tilt angle that ranges from about 0° to about 50°.

84. (Previously Presented) A projection system according to claim 60, wherein the first oblique anisotropic compensation element is splayed relative to the first panel.